Comments on Priorities for the Transatlantic Innovation Dialogue

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Stakeholder Background: Stanford University is Silicon Valley's leading research university. In 2009, the School of Engineering initiated a new graduate course "European Entrepreneurship & Innovation Thought Leaders" (ME421, or EEITL) under the leadership of Dr. Burton Lee, with the goal of 1) educating the Stanford and Silicon Valley communities about the challenges of entrepreneurship and innovation in Europe, and 2) developing deeper relationships with key segments of the European innovation system. EEITL is now in its second year, having successfully completed the 2009-2010 academic years with 150+ enrolled students from Engineering, Business, Medicine, Law and Humanities & Sciences, and over 70 speakers from European startups, venture capital, angel investor groups, corporations, research institutes and government innovation agencies.

During this same timeframe, Dr. Lee has developed early partnership relationships with 9 national and regional European governments: Finland, Norway, Ireland, Denmark, Estonia, Madrid Region (Spain), Basque Region (Spain), Lyon Region (France) and the Lille Region (France).

Proposed Areas and Projects for Cooperation. Stanford would like to propose two pilot projects for consideration by the US Department of Commerce and European Commission's DG Industry and Entrepreneurship:

- **Product Design and Development as a Missing Element of the European Innovation System**. Most European countries lack a robust product and services design and development infrastructure in industry and universities. Relatively few new products are developed each year in the enterprise sector (indigenous SMEs and multinationals), and university engineering schools as a rule lack product design teaching and research programs. Example nations here include Ireland, Spain, Portugal, Turkey and the majority of Eastern European states (exceptions include Germany, Netherlands, and most Scandinavian countries). This capability gap is most notable in consumer products, but can also be seen in industrial and healthcare products as well (computing equipment, medical devices, energy systems, for example). As a result, innovation in existing – vs startup – enterprises suffers.

  European innovation policy, however, often neglects improvements to the innovation capacity in existing industry as a source of new job creation. Innovation policies, as a rule, tend to focus almost exclusively on assisting universities and other IP generating institutions improve their technology transfer process to companies and spinout startups, and to facilitating the aggregation of seed and early stage capital around such startups. Innovation policy experts in Europe and the USA generally neglect the fact that it is often easier – and quicker – to improve the innovation capacity of existing companies through better and faster new product design and development, than to align national university systems with private sector investment and scaling of new startup companies.

  Product design in many of these countries is also typically assumed or relegated – incorrectly – to be the sole province of art and design colleges, much like "industrial design" in the 1950s and 1960s in the United States typically referred to aesthetic design of household goods, consumer items and graphic arts.

Stanford Engineering is currently engaged with several European universities and companies in a number of product design research and teaching projects, with the goal of transferring Stanford's decades of experience to EU institutions with a serious long term commitment to excellence in product design.

It is proposed that new US-EU cooperation programs be developed around supporting leading US engineering schools to expand their relationships with European companies and universities in the areas of product design prototyping, teaching and research. Specific mechanisms might include the delivery of Executive Education programs aimed at specific industry sectors in Europe, and capacity building/knowledge transfer programs aimed at engineering schools in Europe. A demonstration program could be put in place by 2011.

- **A Silicon Valley Center for EU Entrepreneurship and Innovation**. Silicon Valley is becoming a growing focal point for engagement by EU national and regional governments, and by entrepreneurial and innovation sector institutions. Growing numbers of European startup companies are coming to Silicon Valley to secure financing, access global customers and recruit management talent, while keeping their core technical teams back home. Delegations from national and regional governments tour Silicon Valley on a weekly basis, in an effort to understand how this unique innovation cluster works, and why they should have a presence on the ground. Spain, Portugal, Italy, Ireland, Denmark, Finland, France, to name just a few countries, are today seeking effective gateways, mechanisms and partners to bring their newest technologies and companies to global markets. Each of these regions are also seeking partners who understand their domestic innovation sectors, and who can guide them on appropriate innovation and economic development policies.

  Stanford University's Engineering School today is an important focal point for EU regions and innovation sector institutions seeking to gain entry to Silicon Valley venture capital and corporate networks. We believe the European Union would benefit considerably from the creation of a dedicated Center for EU Entrepreneurship and Innovation whose mission would be to 1) educate EU leadership – in government, industry and academia – about how the Valley works, 2) assist innovation sector institutions with establishing their early networks here, and 3) provide ongoing guidance to EU regions regarding best practices in innovation policy globally. Such a Center could be established with a core staff of 3-4 persons by 2011 with funding from the European Commission and other EU stakeholder institutions.

Biography of Author - **Dr. Burton Lee PhD MBA**. Dr. Lee's professional credentials span over 15 years of senior executive leadership and advisory positions with venture-backed startups, global technology corporations, venture capital and private equity firms, federal S&T agencies, state economic development offices, leading research universities, foreign governments and industry associations. His management and technical experience includes senior executive and research positions with Hewlett Packard, GE Global Research, DaimlerChrysler AG and NASA in the United States, Europe and Japan.

Dr. Lee's European experience includes 10+ years of professional and academic assignments in Dublin (Member, National Innovation Taskforce, Office of the Prime Minister, Govt of Ireland - 2009/2010), Stuttgart (DaimlerChrysler Research Labs), Munich (Ludwig-Maximilians-Universität München), Vienna (Bundesamt für Eich- und Vermessungswesen – Austrian National Standards Bureau), Geneva (Intl Union of Food, Agricultural, Hotel, Restaurant, and Allied Workers' Associations - IUF), Prague (Univerzita Karlova v Praze), Barcelona and London.

Dr. Lee is Managing Partner of Innovarium Ventures, a strategic, financial and technical advisory services firm based in Silicon Valley. He also serves as Principal and co-founder of Space Angels Network, a professionally managed national network of accredited investors focused on seed-stage aerospace-related ventures.

Burton holds a PhD in Mechanical and Electrical Engineering (minor) from Stanford University (2002), and an MBA in Finance and Entrepreneurship (Cornell, 2004). He speaks German and Spanish.

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